

**DETAILED ACTION**

***Claim Objections***

1. Claims 5-12 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

***Claim 1***

Referring to lines 6 through 9, if the line is less than 2 m long, the cross section is less than  $10 \text{ mm}^2$ , and if the line is greater than 2 m long, the cross section is less than  $40 \text{ mm}^2$ . This means that if the line is greater than 2 m long, the cross section can also be less than  $10 \text{ mm}^2$ . , since a line of  $40 \text{ mm}^2$  can also have a cross section of less than  $10 \text{ mm}^2$ . It does not distinctly point out the difference in cross sectional area for a line greater than or less than 2 m long. The set containing a cross section less than  $40 \text{ mm}^2$  contains the set containing a cross section less than  $20 \text{ mm}^2$ .

There is also no antecedent basis in the specification which defines the cross sectional area for a length of greater than or less than 2 m.

Appropriate correction and clarification is required.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bluemel (6,384,489) in view of Brunner (6,252,169).

In order to expedite and avoid piecemeal prosecution, the following rejection is made to the extent that the claims are understood, by considering those elements which are understood and interpreting their function in a manner which is consistent with the recited goals of the claims, and then applying the best available art.

In figure 1, (C3, L1) to (C5, L61), Bluemel discloses a motor vehicle electrical system including a generator G in parallel with a battery B1. In (C5, L10-18), Bluemel teaches the fact that the energy accumulator B2 can be a super capacitor in order to optimize the energy to the starter. Bluemel does not teach varying the cross sections of the electrical connection as vaguely recited in lines 6 through 9 of claim 1.

Brunner discloses an electrically conducting cable, and teaches in (C1, L14-32) how cables of variable cross section area are used in a vehicle for various consumers to

optimize the cost of cabling. Brunner does not teach the variation in cross section based upon the length of the cable as implied in claim 1, but since the claim was not clear and there was no antecedent basis for this recitation, it was not addressed.

In order to minimize the cost of cabling used in a power distribution system in a vehicle, it would have been obvious to one of ordinary skill in the art to combine the teachings of Bluemel and Brunner.

### ***Relevant Prior Art***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Harer (5,175,439) discloses a power supply circuit for motor vehicles, and teaches reduction of the cross section of power supply lines by increasing the power supply voltage.

Besnier (6,717,288) discloses a multiple voltage power supply circuit for vehicles, which utilizes a circuit to optimize the transfer of power using the same cross section in the loop. It is possible to transfer 115/14 times more power than on a vehicle equipped with a 14 V network, or 115/42 times the power than on a vehicle equipped with a 42 V network.

Godefroy (6,798,166) disclose an electrical power system for an automobile, and teaches the optimization of cable cross section by systematically controlling current and power. For example a voltage of 36 v is high enough to give a substantial power

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increase, without any current increase, and it is sufficiently low so as not to endanger users.

7. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Albert W. Paladini whose telephone number is 571-272-3748. The examiner can normally be reached from 7:00 AM to 3 PM on Monday, Tuesday, Thursday or Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Jared Fureman can be reached on 571-272-2391. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Albert W Paladini/  
Primary Examiner, Art Unit 2836

4/12/10